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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/896,365	06/29/2001	Frederick Morello	491328-600-006	2229
<div>7590      07/24/2009</div> <div>Blaney Harper Jones, Day, Reavis &amp; Pogue 51 Louisiana Ave., N.W. Washington, DC 20001</div>				
EXAMINER				
CHAPMAN, JEANETTE E				
ART UNIT		PAPER NUMBER		
3633				
MAIL DATE		DELIVERY MODE		
07/24/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

09/896,365

**Applicant(s)**

MORELLO ET AL.

**Examiner**

Jeanette E. Chapman

**Art Unit**

3633

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-12, 14, 15, 17-20 and 28-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-12, 14, 15, 17-20 and 28-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

The following action is supplemental for the following reasons: to correct the first form paragraph to state the 103 statute in stead of the 102 statute, to provide motivation for the first rejection and to clarify which knudson reference used in the rejection.

See amended office action drafted below.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1, 3, 31, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toti (4796393) in view of Knudson (4505084)

Claim 1.

Toti discloses a building panel, comprising:

(a) a curved central portion having a curved shape in cross section perpendicular to a longitudinal direction along a length of the building panel, the curved central portion having transverse corrugations therein;

(b) a pair of side wall portions extending from opposite ends of said curved central portion in cross section, said curved central portion being concave-shaped in cross section from a perspective between said side wall portions, wherein said sidewall portions comprise straight portions that extend tangentially in cross section from the concave-shaped curved central portion; but lacks the

(c) a pair of complementary wing portions extending from said side wall portions. Knudson discloses the pair of complimentary wing portions enabling connection of various panels to form a single panel. It would have been obvious to one of ordinary skill in the art to modify Toti to include the wing portion to enable connection of various panels to form a single

2.

(Canceled).

3.

Toti discloses the building panel of Claim 1, wherein said curved central portion comprises an arc.

claim 31:

Toti discloses the building panel curved in the longitudinal direction

Claim 33

Toti discloses the building panel of Claim 1, wherein the curved central portion is curved in cross section over an entire width of the curved central portion. See figure 2

Claim 1, 3-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson (4505084) in view of Toti (4796393) and Lacasse (4358916)

Knudson (figure 13) discloses a building panel, comprising:

- (a) a curved central portion, between 26 and 27, having transverse corrugations 57 therein;
- (b) a pair of side wall portions 26 and 27 extending from opposite ends of said curved central portion, said curved central portion being concave-shaped from a perspective between said side wall portions, figure 13 wherein said sidewall portions comprise straight portions that extend

tangentially from the concave-shaped curved central portion; and

(c) a pair of complementary wing portions 31/32 extending from said side wall portions.

Lacasse discloses a building panel (see figure 9 ), comprising:

(a) a curved central portion 330 having transverse corrugations therein; however,

(b) a pair of side wall portions 328 extending from opposite ends of said curved central portion, said curved central portion being concave-shaped from a perspective between said side wall portions, wherein said sidewall portions comprise straight portions that extend tangentially from the concave-shaped curved central portion; and

(c) a pair of complementary wing portions 329 extending from said side wall portions.

Lacasse discloses a building structure wherein said central portion is without a longitudinal stiffening notch; see figure 9.

See above for the disclosure of Toti.

claim 3.

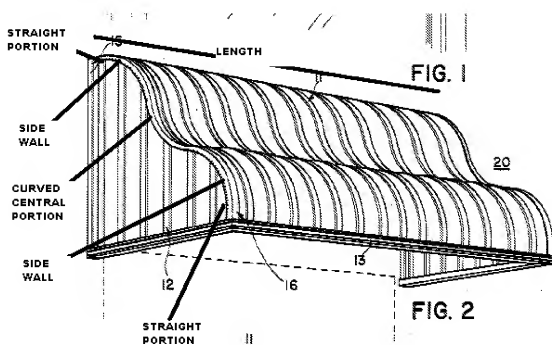
Lacasse and toti discloses wherein said curved central portion comprises an arc .

See above for the disclosure to Toti.

In view of the above: It would have been obvious to fashion the panel to have a curved shape in cross section perpendicular to a longitudinal direction along the length of the building panel and to include the arc central portion to construct a central portion that is easier to fashion as shown by the secondary references in order to easily vary the configuration of the panel.

claim 12.

Knudson and Lacasse discloses a building panel wherein said side wall portions extend at an incline from said opposite ends of said curved central portion.



claim 4.

Knudson discloses the building panel of Claim 3, wherein said arc ranges from 15° to 130°, specifically 55-60 degrees.

claim 5.

Knudson discloses the building panel of Claim 3, wherein said arc ranges from 40° to 130°, specifically 55-60 degrees; alternatively,

claims 4-7

In column 8, the second table discloses angles between 15 and 130 degrees. The arc angles has been considered a matter of choice. One of ordinary skill in the art would have appreciated an arc angle commensurate with the intended design and function of the panel

claims 8-11

adding up all the radii shown in the tables of column 7 and columns 10-11 the arc has a radius ranging from 4 inches to 25 inches. The arc radius has been considered a matter of choice. One of ordinary skill in the art would have appreciated an arc radius commensurate with the intended design and function of the panel

Claim 14-15, 17-20, 28-30, 32,34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knudson (4505084) in view of Toti (4796393) and Lacasse (4358916) and further in view of Karoubas (4579785)

Claims 14-15, 17, 20, 28

Knudson discloses a building panel comprising:

- (a) a curved central portion 25 having transverse corrugation therein; Karoubas discloses corrugations extending in both directions transverse and coextensive; one's reference point determines the transverse and coextensive direction. It would have been obvious to include one, either or both directions for the corrugations in order to improve stiffening or buckling of the building panel
- (b) a pair of side wall portions 26,27 extending from opposite ends of said curved central portion, said curved central portion being concave-shaped from a perspective between said side wall portions, wherein said sidewall portions comprise straight portions that extend tangentially from the concave-shaped curved central portion; wherein said side wall portions extend at an incline from said opposite ends of said curved central portion.
- (c) a pair of complementary wing portions 28,29 extending from said side wall portions. One of said wing portions comprises a hook portion 32 and the other of said wing portions comprises a hem portion 31. alternatively stated a pair of wing portions extending from said side wall

portions, wherein one wing portion extends from a first of said side wall portions and the other wing portion extends from a second of said side wall portions, wherein said one wing portion from a first of said panels is connected to said other wing portion from a second of said panels. See figures 3-5 of Knudson.

See above for the claimed subject matter of Toti  
claim 17

Lacasse discloses a building structure wherein said curved central portion comprises an arc.  
For claims 18-19

In column 8, the second table discloses angles between 15 and 130 degrees. The arc angles has been considered a matter of choice. One of ordinary skill in the art would have appreciated an arc angle commensurate with the intended design and function of the panel

By adding up all the radii shown in the tables of column 7 and columns 10-11 the arc has a radius ranging from 4 inches to 25 inches. The arc radius has been considered a matter of choice. One of ordinary skill in the art would have appreciated an arc radius commensurate with the intended design and function of the panel.

More specifically, in view of the above: It would have been obvious to fashion the panel to have a curved shape in cross section perpendicular to a longitudinal direction along the length of the building panel , to include the arc central portion that is easier to fashion and to easily vary the configuration of the panel as shown by the secondary references.

Claims 29-30:

Knudson discloses a curved building structure wherein said central portion is without a longitudinal stiffening notch.



Claims 31-32:

Knudson discloses the building panel is curved in a longitudinal direction see figure 13.  
claim 34.

Toti discloses the building structure of Claim 15, wherein the curved central portion is curved in cross section over an entire width of the curved central portion.

Applicant's arguments are moot in view of the new ground of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chapman E. Jeanette whose telephone number is 571-272-6841. The examiner can normally be reached on Mon.-thursday, 8:30-6:00, every fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JEANETTE CHAPMAN/  
PRIMARY EXAMINER  
ART UNIT 3633